USER MANUAL

D2A™

DIGITAL TO ANALOG CONVERTER

Improve Your Standard TV Picture Quality NOW!

New!

Get prepared!

FCC mandated conversion of all broadcasts in digital format begins February 17, 2009

RECEPTION & CONNECTIVITY
CONSUMER & PROFESSIONAL PRODUCTS
a division of PCT International, Inc.

Model CM-7000

Remote control included.

For use with any SDTV and digital-compatible antenna, both purchased separately.

SAFETY PRECAUTIONS

CAUTION
To prevent electrical shock. Do not remove this cover. No user serviceable parts inside. Refer servicing to qualified personnel.

The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to person.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Dangerous high voltages are present inside the enclosure. Do not open the enclosure. Refer servicing to qualified personnel only.

WARNING: The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

WARNING: The batteries shall not be exposed to excessive heat such as sunshine, fire, or the like.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instruction unless you are qualified to do so.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

CAUTION: The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.

Please check the label in the bottom of the box for safety information.

BATTERIES

Please dispose of used batteries properly, following any local regulations. Do not incinerate.

WARRANTY

This Channel Master product is warranted to be free from defects in material and workmanship under normal use and service for a period of 90 days after purchase by the original purchaser. Channel Master shall repair or replace defective product, at no charge, or at its option, refund the purchase price, if the product is returned to Channel Master, transportation prepaid, not more than ninety (90) days after purchase. Claimants under this warranty should present their claim along with the defective product, and proof-of-purchase to their dealer immediately upon failure. Noncompliance with any part of this claim procedure may invalidate this warranty in whole or in part. Contact ChannelMaster for details.

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IMPORTANT SAFETY INSTRUCTIONS

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatuses (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade, or the third prong, is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tipping-over.

13) Unplug this apparatus during lighting storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the appartus has been exposed to rain or moisture, dose not operate normally, or has been dropped.

INTRODUCTION

The Channel Master by PCT CM-7000 is a high quality digital ATSC high definition (HD) to standard definition (SD) television converter box for direct terrestrial FTA digital reception allowing the user to view digital programs on analog definition TV sets.

The combination of a CM-7000 Digital Analog Converter with a Channel Master digital antenna is a perfect solution for terrestrial reception in a very wide range of reception conditions and landscape relief.

For energy saving, which is in compliance with NTIA recommendations, the Auto-Sleep Function activates Standby mode four (4) hours after last user entry from the remote control, but not before the end of a currently viewed event.

FEATURES

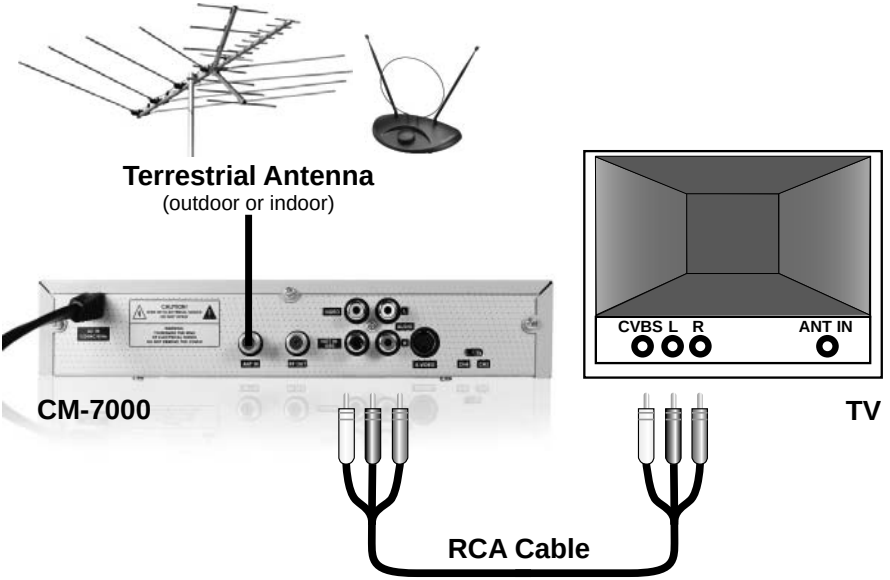
- Converts all digital video formats, including HD (High Definition) into SD (standard definition) analog format
- Easy installation and operation
- Channel scan and channel scan update programming
- Electronic Program Guide (EPG) support
- On Screen Display (OSD)
- Closed Caption (CC)
- Full function remote control
- Low power consumption
- S-Video output
- Auto-Sleep function

SPECIFICATIONS

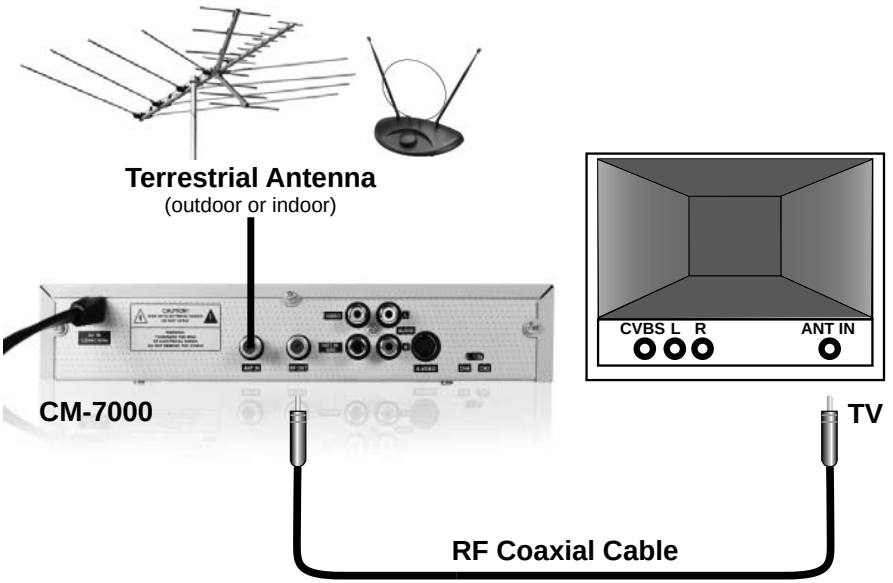
TUNER	
Frequency Range	54 to 864 MHz
Input Impedance	75 Ohm
Input Connector	F-Type, Female
Channel Bandwith	6 MHz
Input Dynamic Range	-83 to -5 dBM / SNR - 15 dB
DEMODULATOR	
Type	8VSB / ATSC A/53 compliant
Performance	ATSC A/74 compliant
Input Video Formats	1080i, 720p, 480i, 480;
VIDEO	
Output Format	480i
Aspect Ratio	4:3 / 16:9 with letter box pan and scan
CONNECTORS	
Video	
Composite Video	RCA
Component Video	S-Video
Audio	
Left / Right	RCA, Stereo
RF MODULATOR	
Output RF Connector	F-Type, Female
Channel	3 / 4, Selectable, Mono Audio
POWER	
Supply	120 VAC / 60 Hz
Consumption “ON”	8 W
Consumption “STANDBY”	2 W
Auto-Sleep Mode	4 hours after last remote control entry
GENERAL	
Dimensions	22 x 16 x 4 cm / 8.7 x 6.3 x 1.6 in (W x L x H)
Weight	0.9 kg / 2.0 lbs
ENVIRONMENT	
Operating Temperature	0 to 60° C / 32 to 140° F
Relative Humidity	10 to 90% noncondensing

CONNECTING

CONNECTING CM-7000 TO A TV USING RCA CABLE

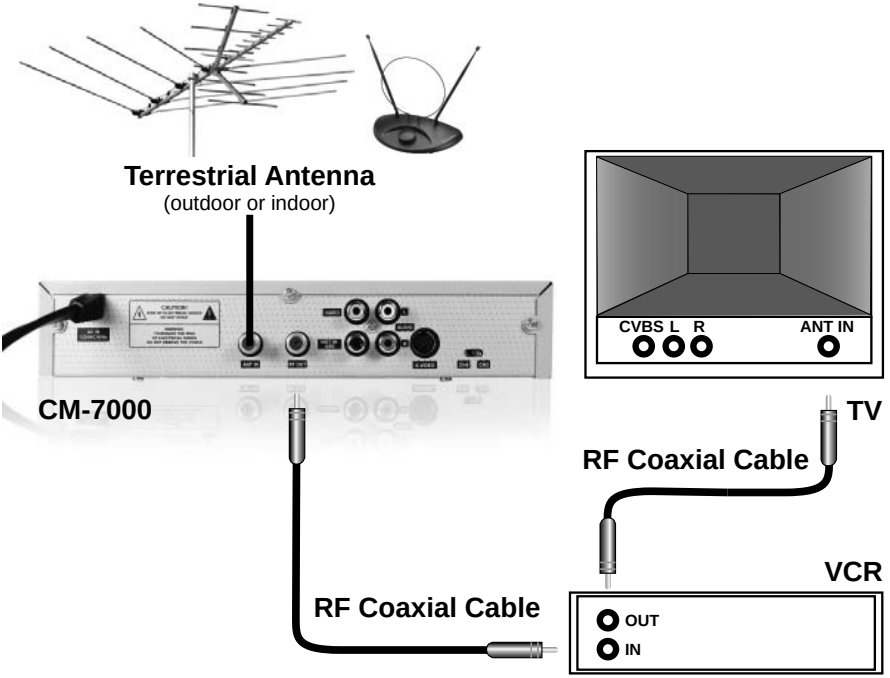


CONNECTING CM-7000 TO A TV USING RF COAXIAL CABLE

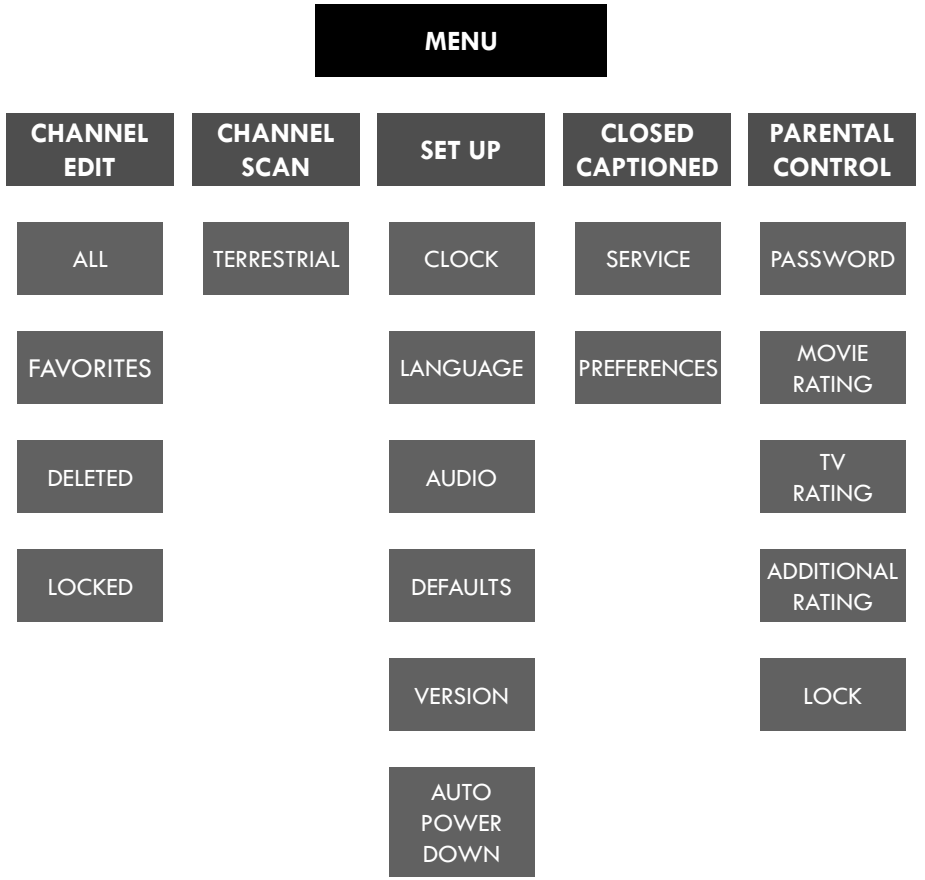


CONNECTING

CONNECTING CM-7000 TO A VCR USING RF COAXIAL CABLE



MENU TREE


MENU
CHANNEL EDIT
ALL
FAVORITES
DELETED
LOCKED
CHANNEL SCAN
TERRESTRIAL
SET UP
CLOCK
LANGUAGE
AUDIO
DEFAULTS
VERSION
AUTO POWER DOWN
CLOSED CAPTIONED
SERVICE
PREFERENCES
PARENTAL CONTROL
PASSWORD
MOVIE RATING
TV RATING
ADDITIONAL RATING
LOCK

REMOTE CONTROL

To program a universal remote to operate the CM-7000 digital to analog converter box, use Pioneer cable box codes.

Mute	Set volume to mute Toggles mute on / off
Option	Not used
Info	Invokes the information banner
Standby	Enters and exits standby mode
Menu	Invokes Menu screen Exit to previous Menu item
FAV	Invokes Channel List menu Switches between Channel List and Favorites List
Exit	Exit from Menu
Arrow Up	Move focused item in menu or channel list
Arrow Down	Move focused item in menu or channel map
Arrow Left	Switch to Favorite Channel List in Channel List Menu Change selection in menu Switch to the next channel in EPG screen
Arrow Right	Switch to Favorite Channel List in Channel List Menu Change selection in menu Switch to the previous channel in EPG screen
OK	Select a channel or menu option
Back	Switch to previously viewed channel
PgU	Unused
PgD	Unused
0 - 9	Numeric key to change channel number or numeric value
CH +	Channel up
CH -	Channel down
Vol +	Increase volume
Vol -	Decrease volume
Audio	Select audio
Wide	Select picture shape
Subtitle	Select Closed Caption (CC)
Text	Unused
Guide	Invokes the EPG screen
Universal Remote Code	For universal remote, use Pioneer Cable Box code
Entering Channel Numbers	When entering channel numbers using the numeric keypad, no "." or "-" is necessary to tune directly to a desired channel. For example: to tune to channel 8.3, press 083 and ENTER; to tune to channel 15.2, press 152 and ENTER.

ONLINE GUIDE

CHANNEL BANNER

- Provides channel major & minor numbers, station name and current time.
- Gets invoked during channel number entry, channel up/down.
- Automatically times out.

ONLINE GUIDE

INFORMATION BANNER

- Provides channel major & minor numbers, station name and current time, program name/description/duration, video resolution, audio language, rating, cc information and signal strength.
- Allows user to browse thru the program description.
- **Info** button on remote invoke information banner.
- Allows user to fine tune antenna.
- Banner does not timeout. Press **Info** to clear.

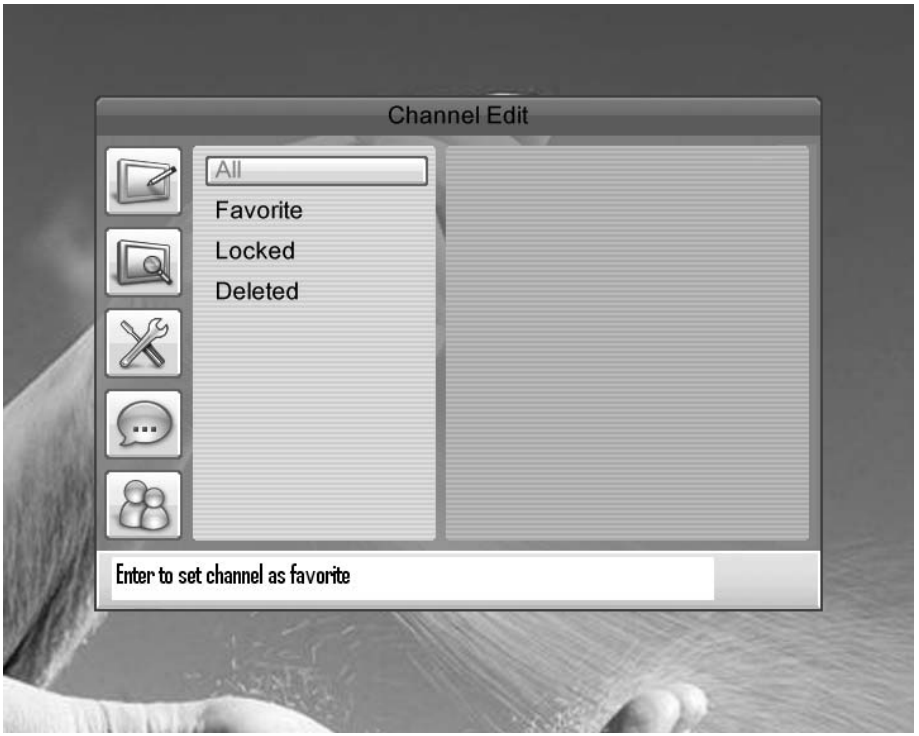
ONLINE GUIDE

MENU

- Allows user to configure the system with easy to use graphical interface.

  Channel Edit
  Channel Scan
  System Setup
  Closed Captions
  Parental Control

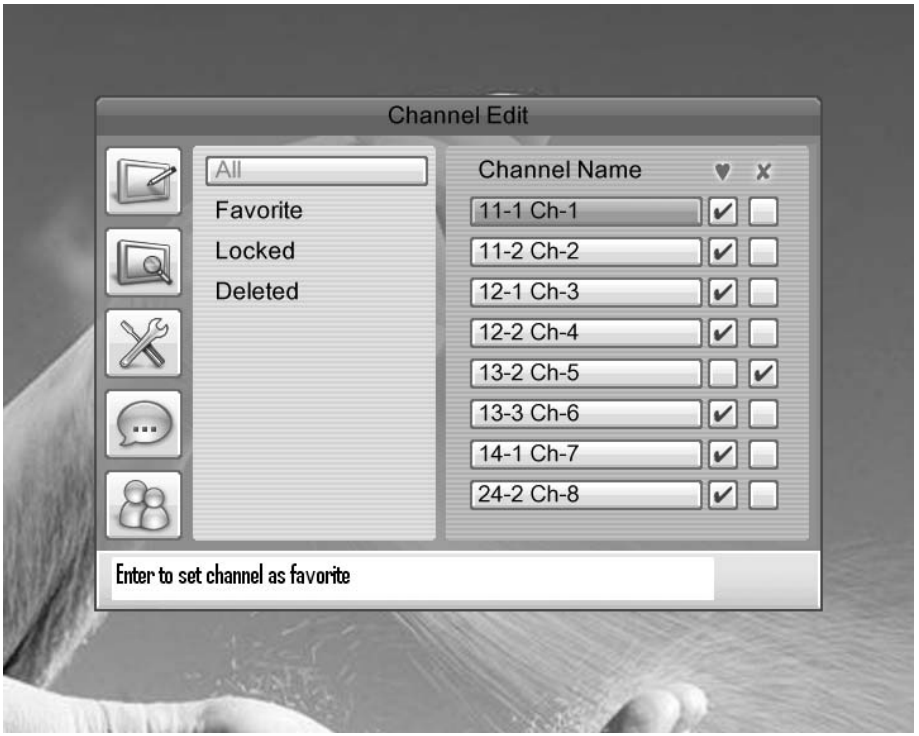
- **Menu** button on remote allows access to access the menu.
- Use **left**/**right, up**/**down, Menu**/**OK** buttons to navigate the menu.



ONLINE GUIDE

MENU - CHANNEL EDIT

- Allows user to set channel as favorite.
- Allows usser to delete channel.
- Allows user to browse locked channel.
- Invoke menu using **Menu** key.
- Navigate to channel edit options using **up**/**down** keys, click **OK** key to access channel edit options that allows you to set channel as a favorite or delete a channel.



ONLINE GUIDE

CHANNEL SCAN

- Automatically searches all terrestrial channels.
- Automatically updates the channel list with only newly found channels.
- Previously set channel properties such as favorite, delete and lock remains the same.
- List the channels that are added to the channel list.
- Monitor the progress of the channel scan.

ONLINE GUIDE

CHANNEL SCAN (continued)

Accesses channel scan OSD:

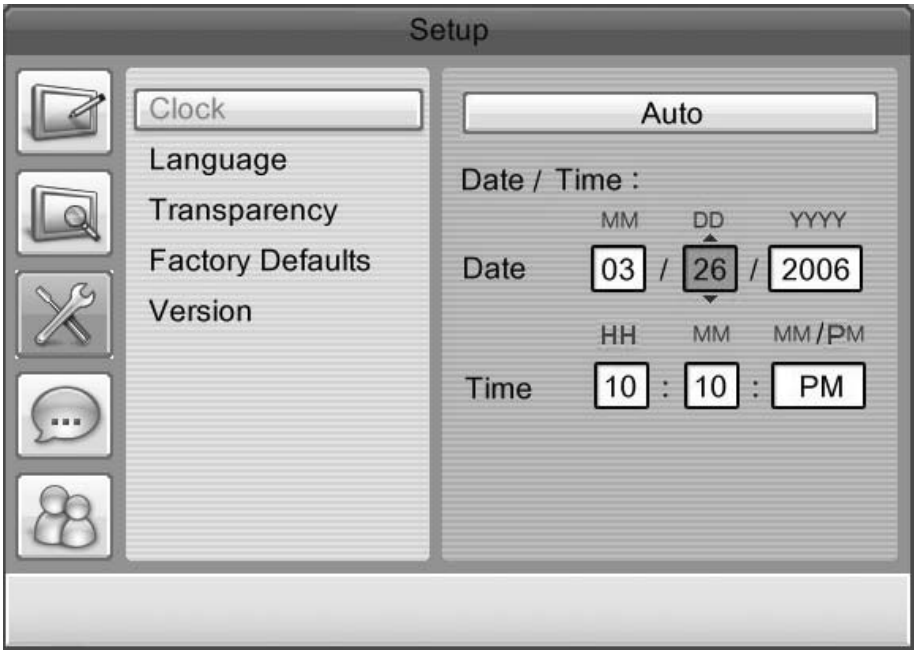
- Invokes menu using **Menu** key.
- Use **up**/**down** and **OK** keys to access channel scan.
- Select either terrestrial or cable to search respective channels.
- Select either scan all or update and click **OK** to start channel scan.
- Scan/update operation shows progress and lists channels as they are found.
- Update is used to add channels without loosing previously found channels.
- Use **Menu** key return back to the previous option, **Exit** key to quit the menu any time.

ONLINE GUIDE

SET UP

Provides easy to user interface to set the system properties like date & time, OSD language, etc.

- Set date and time either automatically or manually.
- Choose English, Spanish, or French as OSD language.
- Returns all settings to factory defaults.



ONLINE GUIDE

SET UP (continued)

To access Setup OSD:

- Invokes menu using **Menu** key.
- Use **up**/**down** and **OK** keys to access Setup.
- Select Clock, Language, Defaults, and Version. Click **OK** to access respective option.
- Clock allows usser to set the system time, time zone, daylight saving time.
- Language option allows usser to select OSD languages.
- Use **Menu** key return back to the previous option, **Exit** key to quit the menu any time.

ONLINE GUIDE

SET UP - CLOSED CAPTION

Provides easy to use interface to select one of the caption services and caption font properties

- Allows user to select one of the available closed caption services (analog and digital).
- Allows font set up of the caption like size, style, edge effects, foreground and background color/transparency.
- Sample caption window displayed reflects caption preferences.

SET UP - CLOSED CAPTION (continued)

To access Setup OSD:

- Invokes menu using **Menu** key.
- Use **up**/**down** and **OK** keys to access Closed Captions.
- Select Services or Preferences. Click **OK** to access respective options.
- Services allows access to select a service.
- Preferences allows access to set captioning font preferences.
- Use **Menu** key return back to the previous option, **Exit** key to quit the menu at any time.

ONLINE GUIDE

SET UP - PARENTAL CONTROL

Provides easy to use interface to set movie and TV limits to block a program based on its rating

- Allows access to set, reset, and change password.
- Resetting password update Date and Count that will indicate when the password was last reset and how many times it was reset.
- Allows access to set movie rating limits to block the programs exceeding the set rating limits.
- Allows access to set TV rating limits to block the programs exceeding the set rating limits.
- Additional rating menu displays program DRRT and allows the user to block those ratings.
- Allows access to block the channel completely irrespective of program ratings.

ONLINE GUIDE

SET UP - PARENTAL CONTROL (continued)

To access Setup OSD:

- Invoke menu using **Menu** key.
- Use **up**/**down** and **OK** keys to access Parental Controls.
- Provide password and navigate **up**/**down** and click **OK** to access the Movie/ TV / Lock screens.
- Access Movie, TV or Additional rating screen to set each limits.
- Access Lock to block channel completely irrespective of rating.
- Use **Menu** key return back to the previous option, **Exit** key to quit the menu at any time.

QUICK MENU - AUDIO

Quick menu that get invoked with single key on remote to select one of the multiple available audio.

- Provides the user with quick access to the list of audio available for that particular program.
- Audio key on remote shall invoke this menu, same key shall be used to browse thru the audio list.
- **Exit** key shall be used to quit this menu, or this gets timed after a few seconds.

TROUBLESHOOTING

When I connect the power cord to the power outlet the front panel indicator goes RED. No Video and Audio.

Note: D2A converter box needs approximately 30 seconds for initial set-up.

Action: Unplug power cord, then plug it again into power outlet and wait for 30 seconds.

When I connect the power cord to the power outlet the front panel indicator goes RED and then ORANGE. No Video and Audio.

Note: D2A converter box is in STANDBY mode.

Action: Press "Power" button on front panel or from Remote Control

When I switch D2A converter box ON the first time "NO SIGNAL" message appears on screen

Note: No channels pre-set or no antenna connected

Action: Check antenna connection and then perform "Scan All" operation - please refer to User Manual.

When I connect my TV set to D2A converter box RF-output I can't receive any signal.

Note: TV set is not tuned to proper channel.

Action: Choose from channel selector on the back of the D2A either ch. 3 or ch. 4 and then tune your TV set to that channel.

When I connect my TV set to D2A converter box using video and audio ports I can't receive any signal.

Note: TV set is not set on proper input source.

Action: Use your TV remote control to select the video input. On some TV sets this may be called Game or Source. Consult TV manual for more information.

I have problem receiving some programs. Picture is "freezing" and Audio is dropping out.

Note: The signal from desired transmitter is too weak.

Action: Try to optimize your antenna position.

After scanning channels I am not receiving all the channels I should receive in my area.

Note: The station transmitters are in different directions.

Action: If you use a rotator to turn your antenna you will need to do an initial channel scan, then turn your antenna to another station direction and do a scan update.

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Pub PCTCM 200801a.CM7000.UM
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